

United States Patent and Trademark Office

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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.

 09/554,708
 07/31/00
 GINOSAR
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 LIT-PI-099

IM22/0731

W GARY GOODSON BECHTEL BWXT IDAHO PO BOX 1625 IDAHO FALLS ID 83415-3899 EXAMINER
MEDLEY, M

ART UNIT PAPER NUMBER
1714

DATE MAILED:

07/31/01

Please find below and/or attached an Office communication concerning this application or pr ceeding.

Commissioner of Patents and Trademarks

| | | Application No. | Applicant(s) | |
|--|---------------------------------|-----------------|--|--|
| A (? | Action Summary | 09/554,708 | GLIVUITA ET AL | |
| Offic A | | Examiner | Group Art Unit | |
| | | MEDLEY | 17/4 | |
| -The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address - | | | | |
| Period for R ply | | 1/11 | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | | | |
| Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | |
| Responsive to communication(s) filed on 5-1-0/ | | | | |
| This action is FINA | L. | | | |
| ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 1 1; 453 O.G. 213. | | | | |
| Dispositi n of Claims | 1-15 | | | |
| Claim(s) /-/5 | | | is/are pending in the application. | |
| Of the above claim(s) | | | | |
| □ Claim(s) 1-/5 | | | is/are allowed. | |
| X Claim(s) | | | is/are epicated to | |
| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) | | | | |
| _ | | | requirement | |
| Applicati n Papers ☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved. | | | | |
| ☐ The drawing(s) filed on is/are objected to by the Examiner | | | | |
| ☐ The specification is objected to by the Examiner. | | | | |
| ☐ The oath or declaration is objected to by the Examiner. | | | | |
| Pri rity und r 35 U.S.C | c. § 119 (a)–(d) | | | |
| ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d). | | | | |
| □ All □ Some* □ None of the: | | | | |
| ☐ Certified copies of the priority documents have been received. | | | | |
| ☐ Certified copies of the priority documents have been received in Application No | | | | |
| □ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)) | | | | |
| | *Certified copies not received: | | | |
| | | | | |
| Attachm nt(s) | Obstantanta DTO 1440 Papar No | (a) 🗆 I | nterview Summary, PTO-413 | |
| illioniation biologic catalogue (1) | | | Notice of Informal Patent Application, PTO-152 | |
| 1 (totice of ficiological) allows: | | | Oth r | |
| □ Notice of Draftsperson's Pat nt Drawing R view, PTO-948 □ Oth r □ Oth r | | | | |
| Office Action Summary | | | | |

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

Part of Paper No. __/O____

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DETAILED ACTION

The disclosure is objected to because of the following informalities: On page 8 line 12 "112" following the phrase "depleted product stream", "112" should be corrected to read as "114".

Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 for reasons made of record in Paper No. 7 dated February 13, 2001 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is further indefinite for "ROH input" because the term "input" has been deleted from claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 for reasons made of record in Paper No. 7 dated February 13, 2001 remain rejected under 35 U.S.C. 103(a) as being unpatentable over John et al 5,520,708 combined with

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Stern et al 4,695,411 or Bradin 5,578,000 in view of JP -9,156,684A abstract and JP 63-112,536A abstract.

Applicant's arguments filed May, 7, 2001 have been fully considered but they are not persuasive.

Applicant's allege that the term "containing substances" does not stand alone, but is part of the term "triglyceride - and fatty acid - containing substances" and therefore submit the term is definite.

It is the examiner's position that the term is indefinite because it is unclear to the examiner as to what are the intended substances. Applicants have not provided a description at page. 5 lines 3-21 for the said substances in terms of its chemical name nor its chemical structure. However, the disclosure at page 3 lines 1-2 after the tittle indicate that the said substance is a reaction of "triglycerides esters and free fatty acids".

Applicants allege that any suitable material may provide a critical fluid medium, depending on the process parameters of the given reaction. However, the phrase "critical fluid medium" is not commensurate in scope with applicants disclosure at page 1 line 26+ that "examples of possible critical fluid solvents are CO₂, SO₂, methane, ethane, propane, or mixtures thereof, with or without critical fluid co-solvents such as methanol, ethanol, butanol or water. The broad terms "alcohol", "catalyst" and "final products" encompass that which is disclosed and that which is not disclosed. The phrase "short chain alkyl group" is a relative term which encompasses 1-4 carbon atoms and those that are not disclosed. It is suggested that applicants may use the phrase "C1-C4

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short chain alcohol" to overcome the said rejection.

With respect to the phrases "liquid catalyst", "acid liquid catalyst", "base liquid catalyst", "solid catalyst" and "inorganic oxide" applicants have not claimed nor defined the conditions that said catalyst are to be used.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the JP-'684 and JP-"536 abstracts, especially the latter teaches transestenfication of fatty acid lower alkyl esters using a critical fluid providing the motivation for combining the Japanese references with the primary references. Furthermore applicants process involves separation steps wherein the said steps are encompassed by the teachings of he primary references providing the motivation for combining the teaching of the JP references separation steps with critical fluids with the teachings of the primary references.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the use of critical fluids in reacting triglycerides and free fatty acids to add solubility benefits, increase reaction rates, decrease the loss of catalytic activity, eliminate mass transfer limitation, reduce the

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quantity of excess reaction required, allow a wide range of catalysts, limit side reactions, and enable clean efficient separations, and in addition reduces catalyst coking, reduce water deactivation of catalyst function, limit water content in the reaction solvent, removes water from the reaction equilibrium, removes glycerol product from the reaction, equilibrium promotes more efficient bi-molecular interactions, and controls the rate of reaction to the limit of diffusivity are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claims as drafted are much broader in scope than the disclosure of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication should be directed to Margaret B. Medley at telephone number (703) 308-2518.

M. Medley/th

July 27, 2001

MARGARET MEDLEY